Remarks

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Applicant has enclosed with this amendment a Petition for Revival of an Application for Patent Abandoned Unintentionally under 37 CFR 1.137(b).

Applicant has included a PTO-2038 Credit Card Payment Form with this amendment to cover the $750.00 fee for the Petition. Small Entity fees still apply.

Applicant believes that no additional claim fees are due, since Applicant originally paid for a total of 55 claims with 6 independent claims, and, after amending the claims as set forth above, a total of 55 claims with 6 independent claims remain pending.

Applicant has also enclosed with this amendment a Power of Attorney and Correspondence Address Indication Form.

Please change the Attorney Docket Number to GTI0001USA.

In accordance with Applicant's duty of disclosure under 37 C.F.R. § 1.56, Applicant respectfully requests that the Examiner consider the references presented in the enclosed Supplemental Information Disclosure Statement and listed on the enclosed Form PTO-1449, and make these references of record in the present application. A copy of each reference is included herewith for the Examiner's consideration. These references were recently found by Applicant during the preparation of this Amendment. Accordingly, the enclosed Supplemental Information Disclosure Statement includes a statement in accordance with 37 C.F.R. §1.97(e)(2) that no item of information was known more than three months ago.

After the restriction requirement and election of claims, and after amending the claims as set forth above, claims 15-18, 20, 22-26, and 56-100 are now pending in this application. Claims 1-14 and 27-55 have been withdrawn in response to the previous restriction requirement. Claims 19 and 21 have been canceled by this amendment.

Regarding the Amendments to Paragraph 0025 of the Specification, Applicant submits that the language of amended Paragraph 0025 more clearly and consistently describes the invention, particularly as shown in Figures 1, 2, and 3. Since Figure 3 is a "front" sectional view of an embodiment taken along the line A-A of Figure 1, per Paragraph 0015 of the original application, the "front side" of the liquid cooler 2 of Figure 1 is the right-hand side. For consistency and clarity, the "front side" of rotating connector 38 of Figures 1 and 2 should also be the right-hand side of the figures, which have been corrected accordingly. This front/rear orientation is also supported in the original application at Paragraph 0017 ("FIG. 5 is a front sectional view of an embodiment taken along the line B-B of FIG. 4;") and at Paragraph 0043 ("Referring now to FIG. 7, ... a membrane 96 is used in lieu of the front face of the heatsink 58 ...") Therefore, no new matter has been introduced into the application by this amendment.

Similarly regarding the Amendments to Paragraphs 0027, 0033, and 0038 of the specification, Applicant again submits that it is more clear and consistent to describe Figures 1, 2, and 3 as having the "front side" of the liquid cooler 2 on the right-hand side. Therefore, the heatsinks 58 are shown connected to the front side 40 of the rotating connector 38, and the specification has been corrected accordingly. No new matter has been introduced by this amendment.

Regarding the Amendments to Paragraph 0028 of the Specification, Applicant submits that this amended language more accurately and precisely describes the invention, particularly as shown in Figure 3. Since the term "coplanar" typically means "lying or occurring in the same plane", and since the inner portion 64 of the bottom side 62 of the heatsink 58 is actually shown as a curved surface in the embodiment of Figure 3, the term "adjacent to and in contact with" is more appropriate. No new matter has been introduced into the application by this amendment, since the change is fully supported in the figures as filed (e.g., Figure 3), in the claims as filed (e.g., Claim 1), and in the specification as filed (e.g., Paragraph 0034).

Regarding the Amendments to the Drawings, Applicant has included replacement informal drawings, and annotated sheets of informal drawings showing the changes to Figures 1 to 6, in the Appendix. Applicant will submit replacement formal drawings upon the Examiner's approval of these changes.

Referring to the specific changes to Figures 1 and 2, previously omitted reference number 63 was added to Figure 1, reference number 36 (from Figure 2) was added to Figure 1, and reference numbers 40 and 42 were reversed in both Figures 1 and 2. These corrections are fully supported in the original specification at Paragraphs 0027 ("Two heatsinks 58, each having a top side 60, a bottom side 62, and a front side 63 ... ") and as described above regarding the Amendment to Paragraphs 0025, 0027, 0033, and 0038 of the Specification.

Figures 1-6 have also been corrected to more accurately show the relative dimensions of the sidewall 22 with respect to the base 16. This correction to the drawings would be apparent to those skilled in the mechanical arts to allow unencumbered rotation of heatsinks 58 and/or block 98 having the square cross-section shown in Figures 3 and 5. Of course, if the heatsinks/block were drawn to have a round cross-section, this correction would not be required. This correction is also supported throughout the original specification, particularly at the following locations:

- [0006] "A method of rotation is provided to rotate the heatsinks and the outer covering."
- [0007] "...The block is configured so that the space is able to receive a container, and a method of rotation is provided to rotate the block."
- [0035] "...The handle 52 is then used to rotate the heatsinks 58 and the container 4 within the container receiver 66...."
- [0045] "In other embodiments, different devices and configurations can be used to rotate the heatsinks."
- [Claim 15] " ...rotating means connected with said housing for rotating said block ..."

Applicant respectfully requests the Examiner's approval of these changes to the drawings and the specification.

In Paragraphs 2 through 5 of the Office Action, the Examiner rejected Claims 15, 16, 17, 19, 20, and 26 under 35 U.S.C. § 102(b) as being anticipated by Christensen (U.S. Patent Number 2,028,825), Claims 15 and 26 as being anticipated by Zittel (U.S. Patent Number 5,327,817), and Claim 15 as being anticipated by Micallef (U.S. Patent Number 4,825,665). In brief, the Examiner recites various elements of these references corresponding to the various claims.

Further, in Paragraphs 6 and 7 of the Office Action, the Examiner rejected Claims 16-18 under 35 U.S.C. § 103(a) as being unpatentable over Micallef (U.S. Patent Number 4,825,665) or Christensen (U.S. Patent Number 2,028,825). The Examiner states that the selection of known material based upon its suitability for the intended use is a design consideration within the skill of the art.

However, in Paragraph 8 of the Office Action, the Examiner objected to Claims 21-25 as being dependent upon a rejected base claim, stating that they would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

Applicant has amended independent claim 15 to include all the limitations of claim 19 (reciting walls defining a cavity) and claim 21 (reciting a cooling liquid in the cavity). Applicant has also amended claim 15 to further define the block cavity as being an enclosed interior cavity such that the cooling liquid is "not in direct contact with said container". This language is supported throughout the application, and particularly at Paragraph 0049.

Applicant submits that the liquid cooler of claim 15, as currently amended, cannot be anticipated or rendered obvious by Christensen, Zittel, or Micallef, or by any combination thereof. Christensen discloses a service container used by sporting event vendors for maintaining ice cream at a low temperatures. Zittel discloses a food heating and cooling apparatus having a rotating auger to agitate the food product conveyed through the apparatus in an axial direction. Neither of these devices would be used to rapidly cool the contents of a liquid beverage container, and neither of these disclosures teach or suggest a block having an inner surface defining a space configured to receive such a container. Although Micallef is designed to rapidly

cool a bottle of wine, it does so by causing the ice/water cooling mixture to swirl around the outer surface of the stationary bottle by rotating the receptacle around the bottle. Micallef does not teach or suggest the use of a block having interior walls defining an enclosed interior cavity for holding the cooling liquid, whereby the cooling liquid is not in direct contact with the container.

In fact, none of the prior art references of record teach or suggest the rapid cooling technique of Applicant's invention, wherein the block surrounds and directly contacts the container to be cooled and serves as a heatsink to rapidly cool the liquid contents of the container as the block and the container are rotated. As stated in Paragraphs 0032 and 0033 of the present application, the heatsink(s) may be utilized with or without a cooling substance, since the heatsink(s) are preferably stored in a freezer before or during use.

New independent claim 56 recites a liquid cooler including a block being in direct contact with the container, and a cooling substance not being in direct contact with the container, whereby the liquid contents of the container are rapidly chilled through the container by the block and the cooling substance as the block and container are rotated. Here, the cooling substance is recited as an element of this independent claim.

New independent claim 77 recites a liquid cooler including a block having an inner space configured to receive the container and to surround and contact a major portion of the outer surface of the container, the block being substantially comprised of a material having high thermal conductivity, whereby the liquid contents of the container are rapidly cooled via heat transfer to the block when the block has been previously made cold. Here, the cooling substance is not recited as an element of this independent claim, but is the subject of dependent claim 81.

New independent claim 85 recites an apparatus for cooling the contents of a container, including a receiver having a plurality of solid walls and an inner space configured to at least partially surround the container and to contact at least a portion of the outer surface of the container, the receiver including an enclosed interior cavity adapted for containing a cooling substance inside the receiver such that the cooling substance does not directly contact the outer surface of the

container. Here, only the cavity for the cooling substance is recited as an element of this independent claim.

New independent claim 91 recites a portable liquid cooler device including receiver means for receiving the container such that a substantial portion of the outer surface of the container is in direct thermal contact with the receiver means, and for cooling the receiver means and the container via thermal conductance, and for maintaining a large temperature gradient between the temperature of the receiver means and the temperature of the liquid in the container. Here, the cooling substance is not recited as an element of this independent claim, but is the subject of dependent claim 96.

New independent claim 100 recites a device for rapidly chilling the liquid contents of a beverage container including a block having a substantially cylindrically shaped inner space configured to receive the beverage container and to surround and directly contact a major portion of the outer surface of the container, the block being substantially larger than the container and being substantially comprised of a conductive material, whereby upon placing the beverage container within the inner space of the block and rotating the block and the container for a period of time, the liquid contents of the beverage container are chilled via heat transfer from the beverage to the block. Here, the cooling substance is not recited as an element of this independent claim.

Hence, Applicant submits that all of the various new independent claims, and their respective dependent claims, recite specific structural or functional limitations that are not taught or suggested in any of the prior art references of record. As is the case for currently amended independent claim 15, these claimed elements and features patentably distinguish Applicant's invention over the prior art.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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Appendix: Replacement Informal Sheets (10 sheets)

Annotated Sheets Showing Changes to Figures 1-6 (6 Sheets)

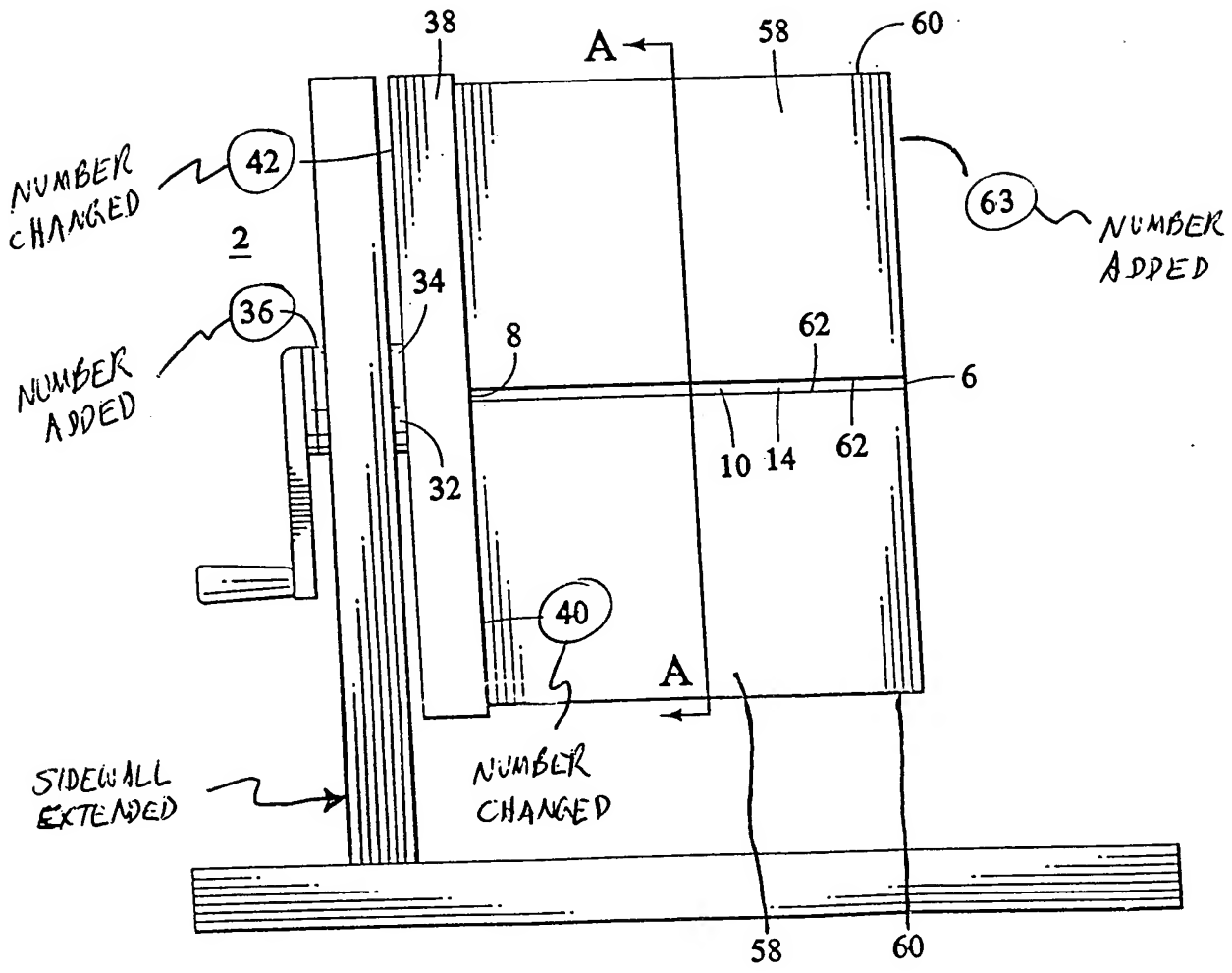

FIG. 1

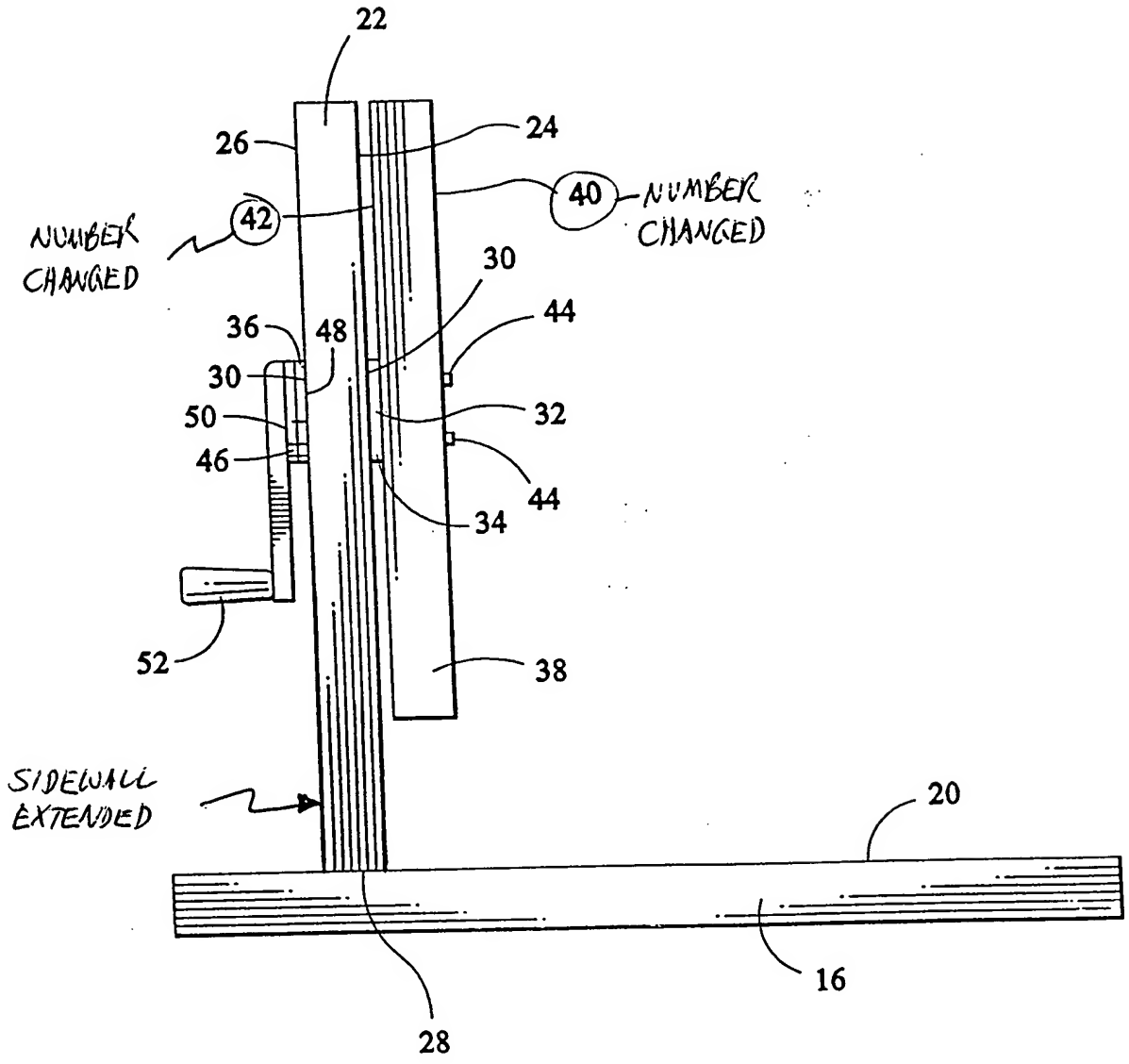

FIG. 2

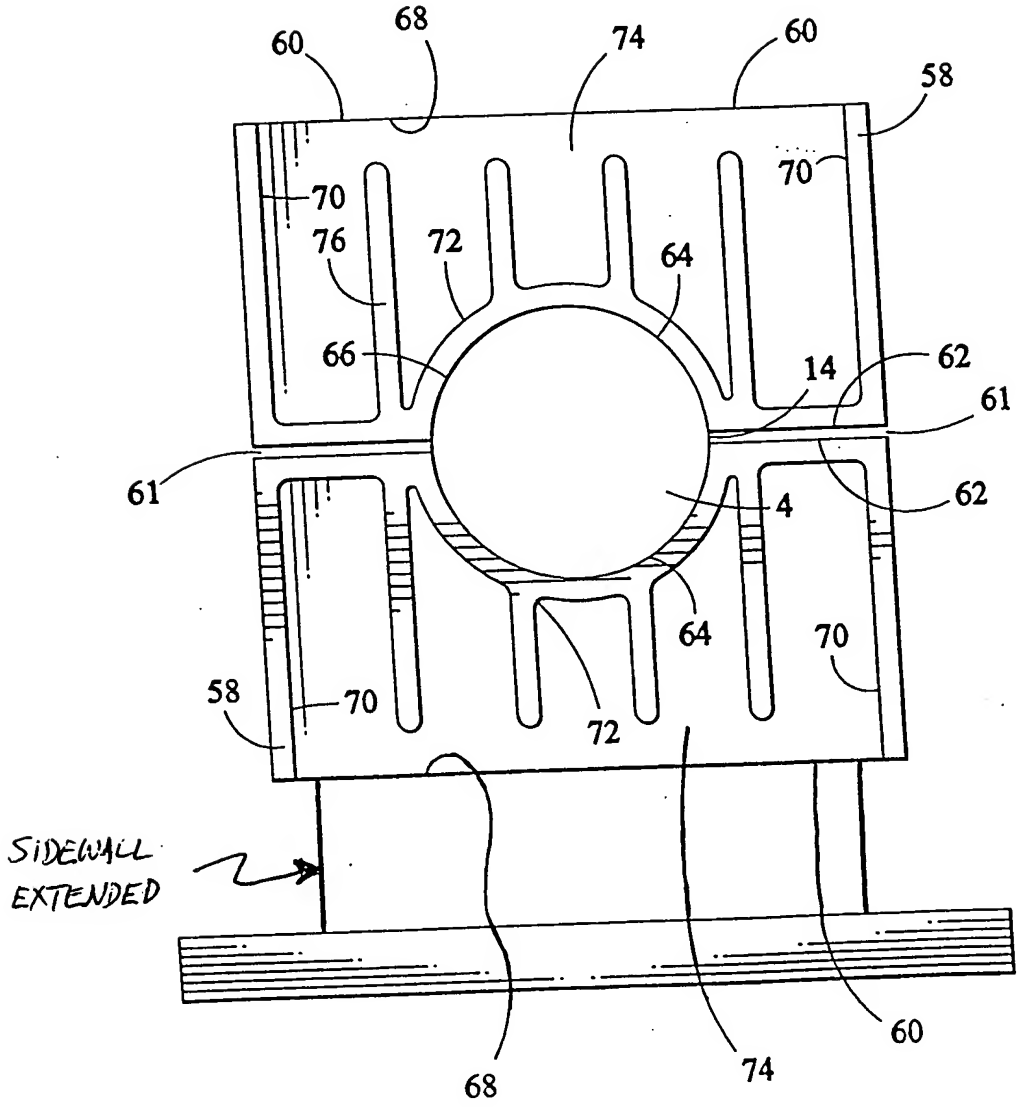

FIG. 3

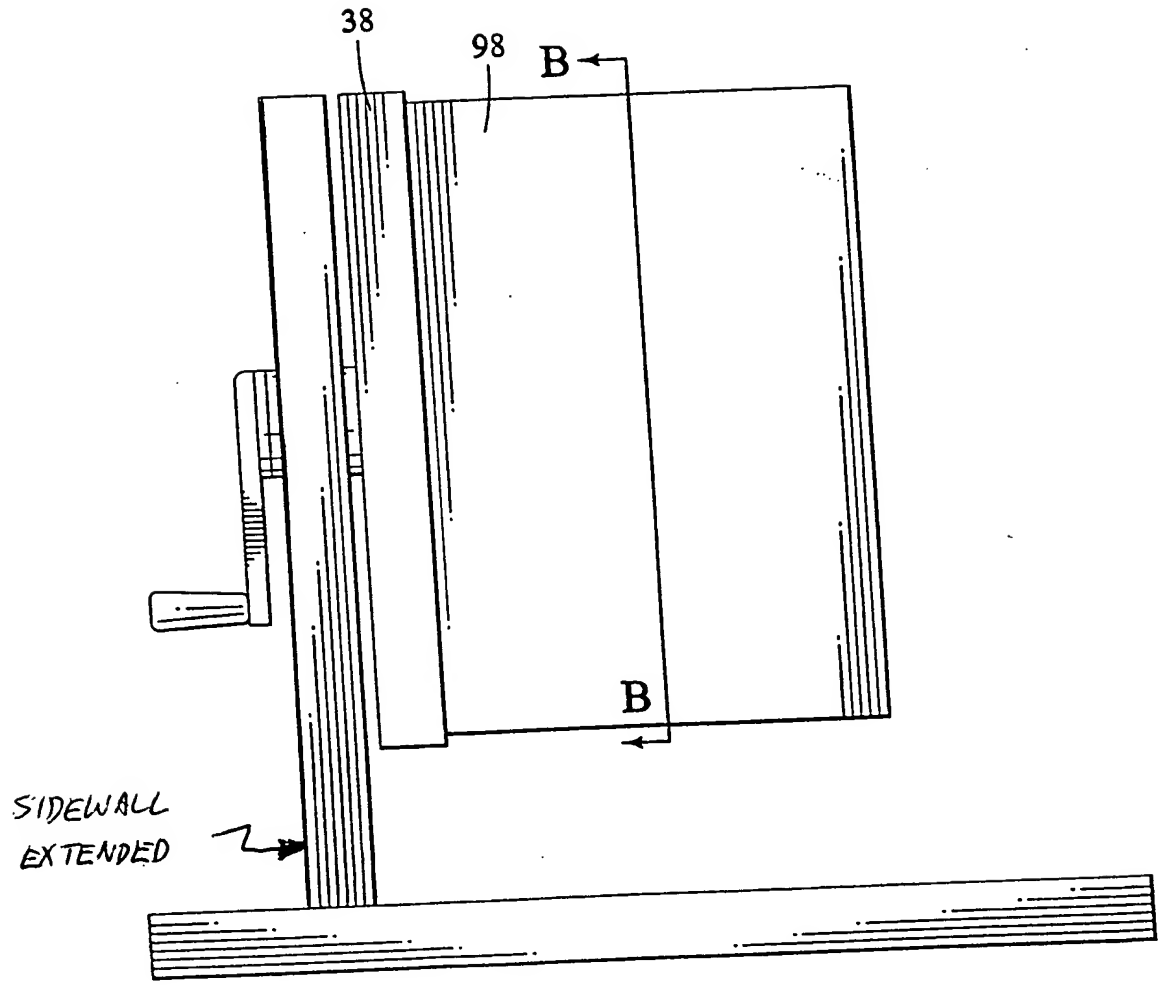

FIG. 4

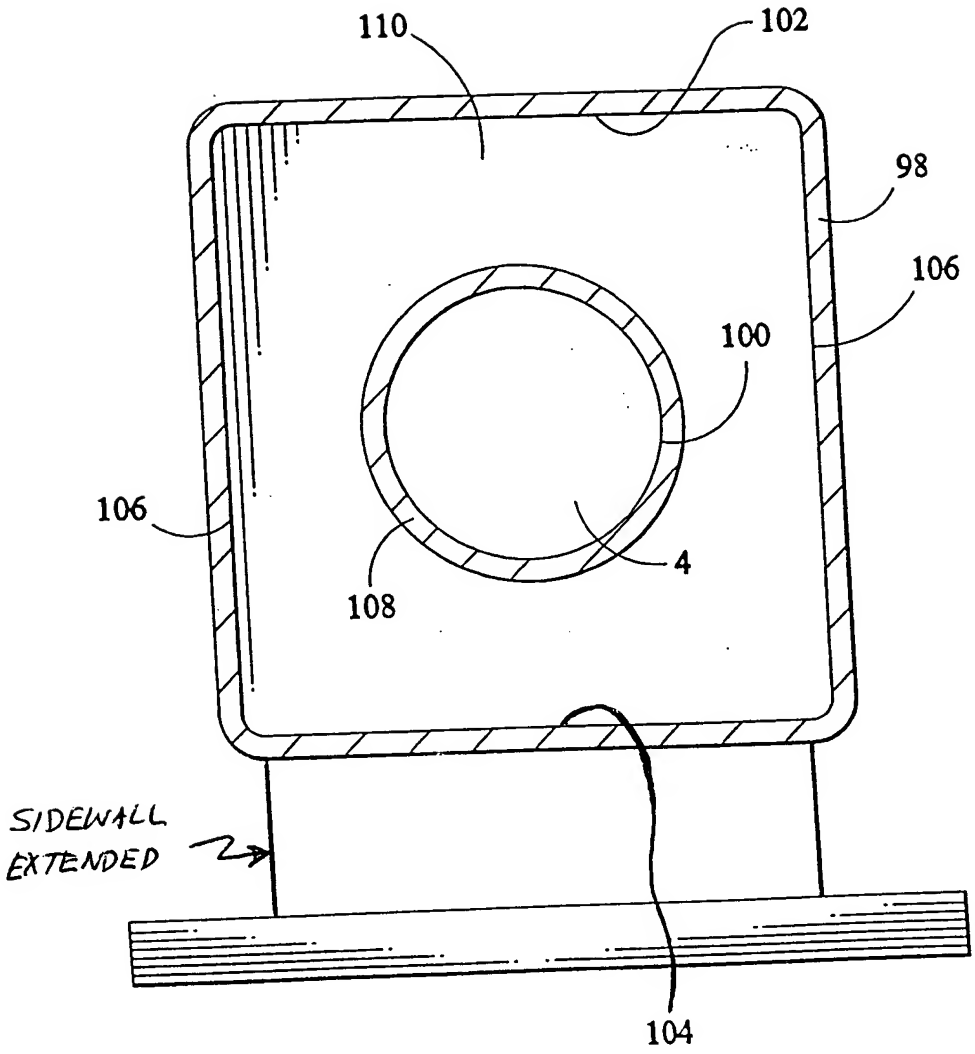

FIG. 5

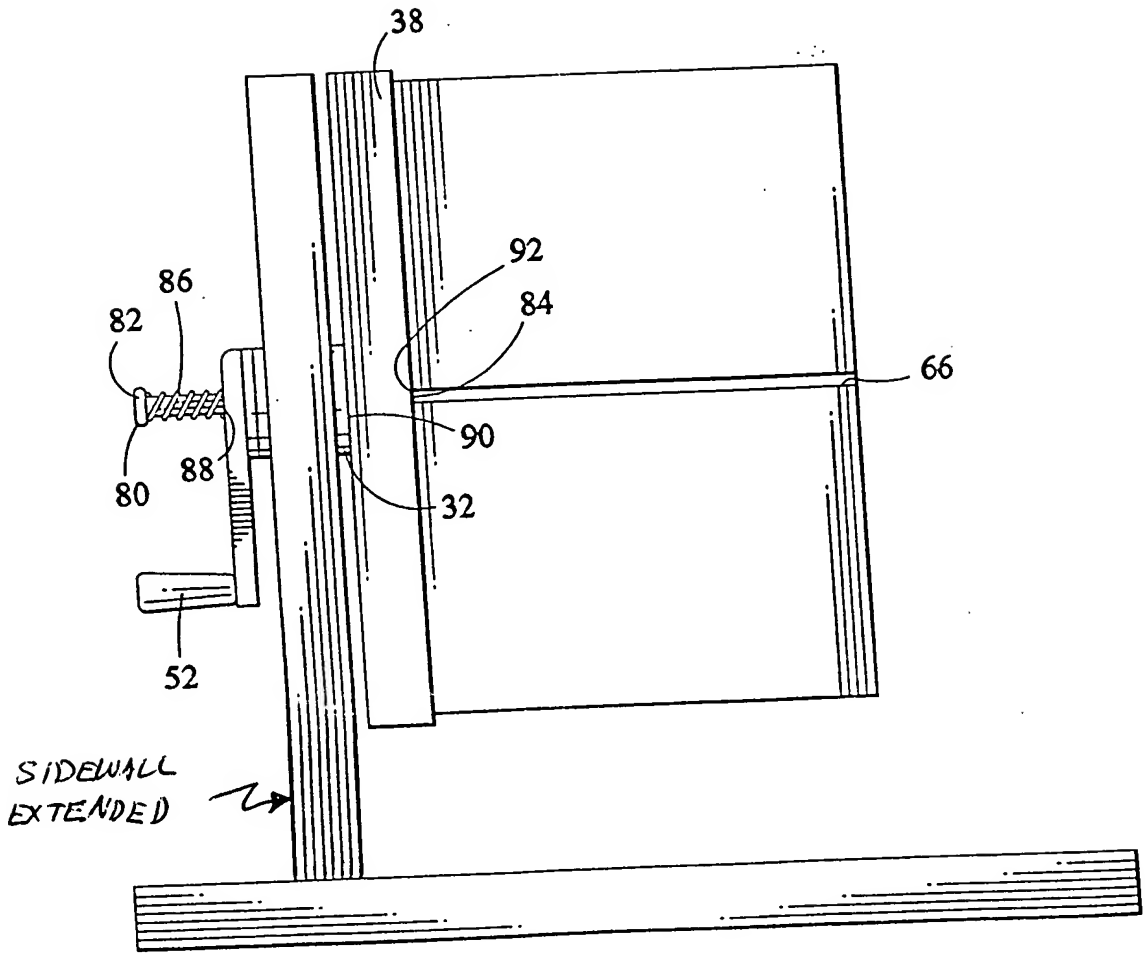

FIG. 6